

IN THE DRAWINGS:

Kindly substitute the drawings filed on October 17, 2001, with the enclosed formal drawings.

IN THE SPECIFICATION:

Please amend the specification pursuant to 37 C.F.R. 1.121 as follows (see the accompanying "marked up" version pursuant to 1.121):

Please amend the paragraph on page 6, lines 4-8, as follows:

Figure 2 (a) and (b). (a) Diagram of a diaphysis sector of cortical long bone. The osteons or haversian system (HA) are located between the outer OL and inner IL circumferential lamellae. The osteonic lamellae are disposed cylindrically around the haversian canal (HC). (b-d) Cross-sectioned osteons as seen (b) under a light microscope; (c) in a microradiograph; and (d) under the polarizing microscope.

Please amend the paragraph on page 6, line 25 to page 7, line 7, as follows:

Figures 8(a) to (d). (a) Bending of femur due to gravity. C indicates the area under compression and T indicates the area under tension. Diagrams (b), (c), and (d) display the distribution of transverse and longitudinal lamellae in the sections prepared from the upper, middle and lower shaft, respectively. The posterior,

anterior, medial and lateral regions correspond to the top, bottom, left and right regions, respectively, on the page. The distance between the centers of two adjacent square symbols measures 1. 86 mm. The size of the square symbol is proportional to the ratio of the bright area in circularly polarized light to bright area in a dark field illumination. The regions with dominant transverse lamellae correspond to the regions with concentration of larger squares in the upper medial, middle medial-posterior and lower posterior shaft, which correspond to the areas of compression in (a). The regions with dominant longitudinal lamellae correspond to the regions with concentration of smaller squares in the upper lateral, middle lateral-anterior, and lower anterior shaft, which correspond to the areas of tension in (a).